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a control section for forming the encoded data and the generated data transmission headers into user data of a short message service; and,

a short message transmitting section configured for transmitting, on a point-to-point channel, short message service blocks that include the user data of the short message service.

9. (Amended) A data receiving apparatus for a digital mobile terminal, said apparatus comprising:

a data transmission header detecting and analyzing section configured for detecting predetermined inherent data transmission headers from short message service blocks received from a point-to-point communication channel, and analyzing the detected data transmission headers;

a decoding section for decoding the received short message service blocks in a predetermined form according to the data transmission headers detected by the data transmission header detecting and analyzing section;

a control section for distinctively determining storage regions of the decoded short message service blocks according to a result of analyzing the data transmission headers; and,

a data storage section for storing the decoded short message service blocks according to the determined storage regions.

at Sul 15. (Amended) A data transmitting method for a digital mobile station using a short message service, said method comprises the steps of:

(1) reading and encoding stored data in a data transmission mode;

(2) generating inherent distinction data transmission headers according to completion of data encoding and for point-to-point communication;

(3) forming the encoded data and the generated data transmission headers into user data of a short message service; and

(4) transmitting, on a point-to-point communication channel, short message service blocks including the user data of the short message service.

- 21. (Amended) A data receiving method for a digital mobile station using a short message service, comprising the steps of:
- (1) in a standby state, detecting whether short message service blocks that have been transmitted on a point-to-point communication channel are received;
- (2) detecting whether the detected short message service blocks detected in step (1) include predetermined inherent distinction data transmission headers for point-to-point communication;
- (3) analyzing the data transmission headers and then decoding the received short message service blocks according to a result of analysis if the data transmission headers detected in step (2) include predetermined inherent distinction data transmission headers for point-to-point communication; and
- (4) storing the decoded short message service blocks in succession to previously processed short message service blocks.

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ay Sub26. (Amended) A short message service data transmitting method for a digital mobile station comprising the steps of:

(1) reading and encoding stored data and making the encoded data into blocks of a predetermined unit in a short message service data transmission mode;

- (2) generating inherent transmission headers configured for point-to-point communication and corresponding to the respective data blocks and adding the transmission headers to the data blocks encoded in step (1), respectively;
- (3) adding short message headers to the data blocks to which the transmission headers generated in step (2) are added, respectively; and
- (4) sequentially transmitting the data blocks on a point-to-point communication channel.
- 30. (Amended) A method of constructing short message service (SMS) blocks for a digital mobile station, comprising the steps of:
 - (1) dividing encoded data into blocks of a predetermined unit;
- (2) generating inherent data transmission headers configured for point-topoint communication and corresponding to the respective divided blocks and adding the generated data transmission headers to the divided blocks, respectively; and
- (3) adding SMS headers configured for point-to-point communication to the divided blocks to which the data transmission headers are added, respectively.



35. (Amended) A short message service (SMS) data block structure, comprising a user data field region which includes an SMS header field including an SMS header configured for point-to-point communication, a data header field for distinction of transmitted data, and a transmitted data field including encoded transmitted data.

42. (Amended) A short message service block transmitting and receiving apparatus for a digital mobile station, comprising:

a short message service block transmitting and receiving section configured for transmitting and receiving short message service blocks by means of a point-to-point communication channel;

a transmitted data storage section for storing the transmitted and received short message service blocks;

a data coding section for encoding the transmitted data and dividing the encoded data into blocks of a predetermined unit, the data coding section sequentially decoding the blocks sequentially received in a predetermined order;

a header generating section for generating inherent transmission headers to be added to the respective blocks, the headers being configured for point-to-point communication;

a transmission header detecting and analyzing section for detecting and analyzing the inherent transmission headers included in the received short message service blocks; and

a control section for designating a storage order of the decoded blocks

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